THE CLAIMS

This listing of claims replaces all prior versions and listings of claims in the application.

IN THE CLAIMS

1. **(PREVIOUSLY PRESENTED)** A process for the production of electrical steel sheet cores for use in electrical equipment comprising the following steps

a) applying of at least one coating layer of an aqueous composition 1 or aqueous composition 2 onto the surface of the electrical steel sheet, wherein said aqueous composition 1 consists of

A1) 100 parts per weight of one or more epoxy resins based on bisphenol-A-type, 100% of solids,

B1) 1 to 25 parts per weight of dicyandiamide,

C1) 0.1 to 10 parts per weight of additives,

D1) 0.1 to 120 parts per weight of at least one organic solvent as flow agent and

E1) 50 to 200 parts per weight of water,

and wherein said aqueous composition 2 consists of

A2) 100 parts per weight of one or more epoxy resins based on bisphenol-A-type, mixed with water to form an epoxy dispersion,

B2) 1 to 25 parts per weight of dicyandiamide,

C2) 0.1 to 10 parts per weight of additives,

D2) 0.1 to 120 parts per weight of at least one organic solvent as flow agent; and

said aqueous composition 2 has a solids content of 30% to 60%;

b) drying the applied layer under increased temperature; and

c) assembling of at least one coated electrical steel sheet obtained in step b) with at least one additional electrical steel sheet to form a sheet core

and bonding the sheets with each other by thermal curing of the coating.

2-3. (CANCELED)

4. (PREVIOUSLY PRESENTED) The process according to claim 1 wherein water is added in a quantity such that a solids content of 30 to 60% is obtained for the composition of step a).

5. (ORIGINAL) The process according to claim 1 wherein the number average molar mass of the epoxy resin is from about 700 to 5000, the epoxy equivalent weight from about 400 to 6000.

6. (ORIGINAL) The process according to claim 1 wherein micronized dicyandiamide is used with an average particle size of no greater than 6 µm.

7. (PREVIOUSLY PRESENTED) The process according to claim 1 wherein diethylene glycol monobutylether is used as a flow agent in a quantity of 2 to 70 parts per weight.

8. (CANCELED)

9. (ORIGINAL) The process according to claim 1 wherein the composition is applied onto the unpretreated and uncoated electrical steel sheet as one-layer-coating with a layer thickness of 3 to 8 µm.

10. (ORIGINAL) The process according to claim 1 wherein the drying of the coating is effected at temperatures causing a PMT in the range of 230 to 260°C.

11. (ORIGINAL) The process according to claim 1 wherein the bonding and curing of the coating is effected at temperatures from 100 to 300°C and at a pressure of 1.0 to 6.0 N/mm^2 during a fixed time period.

12. (WITHDRAWN) An electrical steel sheets core for use in electrical equipment produced by the process according to claim 1.

13. **(PREVIOUSLY PRESENTED)** A process for the production of electrical steel sheet cores for use in electrical equipment comprising the following steps

a) applying of at least one coating layer of an aqueous composition 1 or aqueous composition 2 onto the surface of the electrical steel sheet, wherein said aqueous composition 1 consists of

A1) 100 parts per weight of one or more epoxy resins based on bisphenol-A-type, 100% of solids,

B1) 1 to 25 parts per weight of dicyandiamide,

C1) 0.1 to 10 parts per weight of additives,

D1) 0.1 to 120 parts per weight of at least one organic solvent as flow agent and

E1) 50 to 200 parts per weight of water, and

one or more monomeric organo-metallic compounds selected from the group consisting of ortho-titanic and –zirconic acid esters;

and wherein said aqueous composition 2 consists of

A2) 100 parts per weight of one or more epoxy resins based on bisphenol-A-type, mixed with water to form an epoxy dispersion,

B2) 1 to 25 parts per weight of dicyandiamide,

C2) 0.1 to 10 parts per weight of additives,

D2) 0.1 to 120 parts per weight of at least one organic solvent as flow agent; and

one or more monomeric organo-metallic compounds selected from the group consisting of ortho-titanic and –zirconic acid esters;

said aqueous composition 2 has a solids content of 30% to 60%;

b) drying the applied layer under increased temperature; and

c) assembling of at least one coated electrical steel sheet obtained in step b) with at least one additional electrical steel sheet to form a sheet core and bonding the sheets with each other by thermal curing of the coating.